

Chapter 12

Forestry in the French Broad River Basin

12.1 Forestland Ownership

Controlling 72 percent of the approximately one million acres of forestland, North Carolina's non-industrial, private forest landowners own a majority of the forests found in the French Broad River basin (Figure 15). Less than 1 percent of the forestland is actually owned by the forest industry. The remaining 27 percent is under public ownership (Brown, January 2004). Publicly owned forestland primarily consists of the Pisgah National Forest, Nantahala National Forest, and the Great Smokey Mountains National Park. For more information about forestland ownership or a copy of the most recent statistics for North Carolina, visit the USDA Forest Service Southern Research Station webpage at <http://www.srs.fs.usda.gov/>.

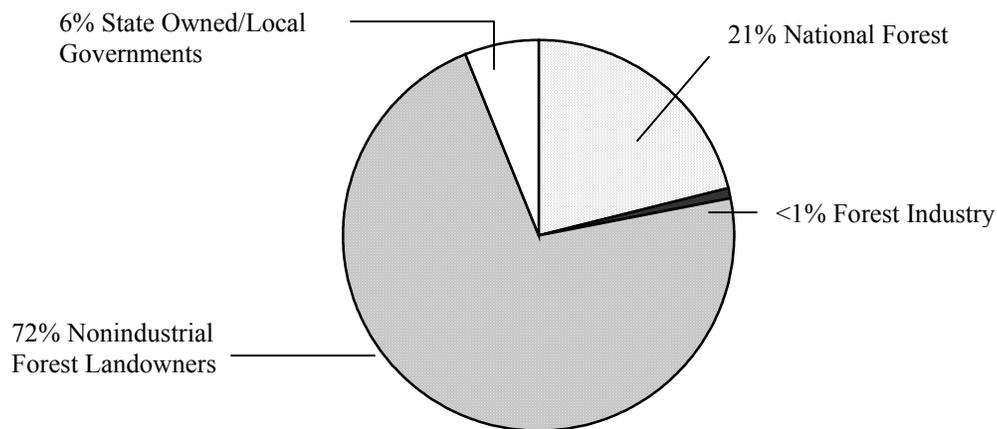


Figure 15 Ownership of Forestland in the French Broad River Basin

12.1.1 Forest Management

Forest management is an economic driver within the French Broad River basin. For the period of September 1997 through August 2002, nearly 2,850 acres of privately-owned forestland in the basin were planted in trees, with a majority of these acres utilizing cost shared funding through various North Carolina or federal programs. Over 900 forest management plans were developed to support sustainable forests on 43,600 acres of forestland owned by non-industrial, private landowners within this same time period. Currently, there are 23 tracts, containing nearly 3,500 acres certified as Forest Stewardship Forests within the basin. Furthermore, the Forest Legacy Program has invested close to \$500,000 in the French Broad River basin to purchase easements and property to maintain sustainable forestland and protect water quality. For more information on forest management, visit the website at www.dfr.state.nc.us.

12.1.2 Urban Forestry

The City of Asheville and Town of Brevard have been certified as Tree City USA communities for well over 20 years. Since 1997, The Urban Forestry and Community Development Grant Program has invested nearly \$200,000 into 21 community-based urban forestry projects in the basin. These projects include urban forestry education, teacher training, forest inventories, tree planting, and urban forest management. Urban forestry is a vital component in reducing runoff by promoting green space and integrating trees into traditional cityscapes.

12.1.3 Forest Utilization

From the most recent wood product utilization data available (September 2003), 14 different businesses reside in the French Broad River basin that are considered "Primary Processors" of forestry-related raw material (i.e., sawmill, veneer mill, oriented strand board mill, chip mill, paper mill, etc.). Twenty-nine primary processor businesses purchase forestry-related raw material from the basin, which represents fewer than 10 percent of the primary processors located in North Carolina.

12.2 State Forests (SFs)/Educational State Forests (ESFs)

North Carolina's ESFs are designed to teach the public, especially school children, about the forest environment. Each ESF features self-guided trails that include information kiosks, exhibits, tree identification signs, a forest education center, forestry BMP demonstration areas, and a talking tree trail. Specially trained rangers are available to conduct classes for school and other youth groups. Teachers or group leaders choose from a selection of 30-minute programs that cover all aspects of the forest environment - from soil, water and wildlife to timber and forest management. More information on the Division of Forest Resources (DFR) SFs and ESFs can be found on the website at www.dfr.state.nc.us.

In Henderson County, DFR manages over 10,000 acres at Dupont State Forest. This forest is managed for many benefits including protection of unique natural communities, forestry demonstration and research, watershed protection, wildlife, hunting and fishing, and protection of cultural resources. Over 120,000 visit Dupont State Forest annually for its waterfalls, trails, fishing, restricted hunting and scheduled programs.

Also in Henderson County, DFR manages approximately 235 acres at Holmes Educational State Forest, thus, providing buffer protection to Crab Creek. The forest is managed as an outdoor classroom for school groups and the general public, as well as for sustainable forestry and group camping.

12.3 Forestry Water Quality Regulations in North Carolina

12.3.1 Forest Practices Guidelines for Water Quality (FPGs)

Forestry operations in North Carolina are subject to regulation under the Sedimentation Pollution Control Act of 1973 (G.S. Ch.113A Art.4 referred to as "SPCA") and amendments thereof. However, forestry operations are exempt from the permit requirements of the SPCA, if the

operations comply with performance standards outlined in the *Forest Practices Guidelines Related to Water Quality* (15A NCAC II .0101 - .0209, referred to as "FPG's") and North Carolina General Statutes that address stream obstruction (G.S.77-13 and G.S.77-14). Detailed information on maintaining compliance with the FPGs is available on the *Water Quality Section* of the DFR website at www.dfr.state.nc.us.

DFR is delegated the authority, by the Division of Land Resources (DLR), to monitor and evaluate forestry operations for compliance with these aforementioned laws. In addition, DFR works to resolve FPG compliance questions brought to its attention through citizen complaints. Violations of the FPG performance standards that cannot be resolved by DFR are referred to DLR for enforcement action. During a five-year period beginning September 1997, DFR conducted 434 FPG inspections of forestry and/or timber harvesting activities in the basin; approximately 72 percent of the sites inspected were in compliance with the FPGs. Six sites were later referred to DLR for noncompliance enforcement.

12.3.2 Other Forestry Related Water Quality Regulations

In addition to the FPGs, DFR monitors the implementation and compliance of the following in this basin:

- The US Army Corps of Engineers' (USACE) Section 404 Dredge and Fill exemption for forestry activities.
- The USACE's 15 Best Management Practices to satisfy the exemption related to forest road construction in wetlands.
- The USACE's six (6) Best Management Practices for mechanical site preparation in support of pine plantation silviculture in southeastern wetlands.

12.3.3 Water Quality Foresters

One Water Quality Forester covers a large portion of the French Broad River basin. Created in 1999, Water Quality Forester positions are assigned to seven of the DFR's 13 districts across the state. The Water Quality Foresters conduct FPG inspections, develop pre-harvest plans, and provide training opportunities for landowners, loggers and the public regarding soil conservation and water quality protection practices related to forestry. Service foresters and county rangers also handle water quality issues in the remainder of the basin, along with their other forest management and fire control responsibilities. Contact information for each district and/or county can be found on DFR's website at www.dfr.state.nc.us.

12.3.4 Forestry Best Management Practices (BMPs)

Implementing forestry BMPs is strongly encouraged by the DFR in order to efficiently and effectively protect the water resources of North Carolina. The *Forestry Best Management Practices Manual* (NCDENR-DFR, September 1989) describes recommended techniques that should be used to help comply with the state's forestry laws and help protect water quality. Also known as the "Blue Book", this manual is currently undergoing its first revision since adoption in 1989. Revisions to the manual are led by the DENR appointed Technical Advisory

Committee (TAC). The second edition of the manual will be printed in a condensed pocket-sized version, as well as a comprehensive desktop text. The pocket-sized, condensed version will allow for greater distribution and on-site use by loggers and equipment operators. More information on forestry BMPs can be found at DFR's website at www.dfr.state.nc.us.

Among the BMP's promoted for timber harvesting is the use of bridgemats for establishing temporary stream crossings. DFR provides bridgemats for short-term loan to loggers for use in a major portion of French Broad River basin. DFR's Bridgemat Loan and Education Program is an educational and protection project which promotes the benefits of using portable bridges for stream crossings, in lieu of using other techniques such as culverts or hard-surface crossings, both which have a greater potential to result in stream sedimentation. Grant awards from the EPA Nonpoint Source Pollution Management Program have funded all bridgemat purchases for this loan program. It is recommended that additional bridgemats be made available for forestry activities in the French Broad River basin. Further information on DFR's Bridgemat Loan Program can be found on the DFR website at www.dfr.state.nc.us.

Since the last basin plan was issued, DFR has implemented the following in an ongoing effort to improve compliance with forest regulations and, in turn, minimize nonpoint source pollution from forestry operations:

- (1) Established one Water Quality Forester position in the French Broad River basin.
- (2) Implemented internal and external water quality training programs specific to FPG and BMP performance.
- (3) Established the Forestry Nonpoint Source Unit at the Raleigh Central Office.
- (4) Completed North Carolina's Forestry BMP Implementation Survey (2000-2003) field data collection and Interim Report. Final Report development is ongoing.
- (5) Expanded the Bridgemat Loan and Education Program and completed a three-year summary report.
- (6) Encouraged the use of Forestry BMPs through the ProLogger education and water quality programs offered by the North Carolina Forestry Association.
- (7) Undertaking revision of the North Carolina's Forestry BMP Manual (2nd Edition).
- (8) Established a new water quality website for the forestry community and North Carolina citizens.

DFR continues its efforts to protect water quality through education and training programs, demonstrations and research projects. Projects that address forestry NPS pollution prevention can be found on the website at http://h2o.enr.state.nc.us/nps/What_is_NPS/forestry.htm. Progress reports on these projects will be made available at the DFR website (www.dfr.state.nc.us).